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10/500,657

02/14/2005

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04:81

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09/05/2008

EXAMINER

SKRIPNIKOV, ALEX

ART UNIT

PAPER NUMBER

2616

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DELIVERY MODE

09/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/500,657 | Applicant(s) BERWANGER ET AL. | |
| | Examiner Alex Skripnikov | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. A 37 CFR § 1.132 declaration, filed 08/14/2008, signed by the common inventors who are named as inventors in the Weigl et al. (US 6,842,808) patent, with respect to the rejection(s) of claims 13-15 and 20-23 under 35 U.S.C.102(e), has been entered. Therefore, the rejection(s) of claims 13-15 and 20-23 under 35 U.S.C.102(e) have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Weigl et al. (US 6,842,808). Accordingly, **this action is made Non-Final.**

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **13-15 and 20-23** are rejected under **35 U.S.C. 102(b) and 35 U.S.C. 102(a)** as being anticipated by **Weigl et al. US 6,842,808, as a Pre-Grant Publication US 2001/0018720, published on August 30, 2001.**

As to claims 13 and 20:

Weigl et al. discloses a method and a device for the exchange of data in messages, including a data bus and the users connected to it (Weigl et al.; column 1,

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lines 44-48), in which the data transmission is effected within cyclically repeating timeframes (first or base cycles) (Weigl et al.; column 2, lines 24-35, line 56-57; Fig 4, BZ0a-BZ7a) with at least two timeslots (timing windows) each (Weigl et al.; column 3, lines 20-22; (shown as timing window on Fig. 2)), and each timeslot is intended for transmitting one message (Weigl et al.; column 3, lines 22-24), one message contains at least some of the useful data (Weigl et al.; column 6, lines 28-30), and each message is assigned an identifier (Weigl et al.; column 6, lines 28-30), characterized in that the identifier is stored in each message as part of the message (Weigl et al.; column 6, lines 28-30); that each message additionally includes data about the cycle ((base mark, rate of repetition) Weigl et al.; column 6, lines 28-33); that the timeslots have a fixed length (Weigl et al.; column 5, lines 6-9; timing windows are also shown fixed on Fig. 2); and that at least one of the timeslots of one timeframe can be used, in various cycles, for offset transmission of different messages that are not intended for transmission in every cycle (Weigl et al.; column 6, lines 19-27; shown on Fig.4 in timing window ZF5a, different messages (B,C) are transmitted offset (not transmitted in every cycle)).

As to claim 21:

Weigl et al. discloses that the users of the communication system are each allocated at least one predeterminable timeslot of the timeframes (component of transmission matrix) for data transmission. (Weigl et al.; column 6, lines 1-4; transmission groups also shown on Fig.4).

As to claims 14, 15, 22 and 23:

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Weigl et al. discloses that the message includes data about the cycle (base mark (an ordinal number of cycle in which the message is sent first), rate of repetition (defines after how many cycles **this** (current) transmission is repeated)) (Weigl et al.; column 6, lines 28-42). Therefore, data about the cycle pertain to the message and therefore pertain to the current cycle in which the message is sent and include an ordinal number of the cycle.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **16-19 and 24-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Weigl et al. US 6,842,808, as a Pre-Grant Publication US 2001/0018720, published on August 30, 2001** in view of **Stoneking et al. US 6,606,670**.

As to claims 16-19:

Weigl et al. discloses the claimed invention above. In addition to Weigl et al. also teaches that the message includes the time data (timing window) which include data about the chronological position of a timeslot within a timeframe (Weigl et al.; column 6, lines 28-37).

Weigl et al. fails to teach that time data can be learned from the identifier; that cycle data are stored in memory in a message as part of the identifier of that message.

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However, Stoneking et al. discloses that any convenient fields and message format may be used depending on the particular implementation contemplated (Stoneking et al.; column 5, lines 6-8). Stoneking et al. discloses that message identifier used together with other field (RTR bit) for the purpose of message arbitration. (Stoneking et al.; column 5, lines 15-28; Arbitration Field (identifier associated with other fields) (154) is shown on Fig. 2A, 2B).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to access identifier field and supplemented (timing window or (base mark and rate of repetition)) fields described by Weigl et al. in a combination thereof described by Stoneking et al. in order to arbitrate messages (Stoneking et al.; column 5, lines 15-28).

Furthermore, It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to retrieve the time data from the identifier combined with the timing window field.

As to claims 24-31:

Weigl et al. disclose the claimed invention above. In addition to Weidl et al. also teaches that the current cycle data are monitored by the users (reference message received by all nodes and include number of instantaneous cycle (Weigl et al.; column 4, lines 23-30)); predeterminable value stored in a memory of the user for the cycle data (watchdog Weigl et al.; column 4, lines 44-49); a message is sent by a user in a predeterminable timeslot only if the current cycle data match a predeterminable value,

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stored in a memory of the user, for the cycle data (watchdog is actuated Weigl et al.; column 4, lines 61-65).

Weidl et al. fails to teach that the messages (data traffic) are observed by the users of the communication system; that the identifiers and the cycle data of the messages are compared with predeterminable values, stored in memories of the observing users, for the identifier and the cycle data, and at least the useful data of a transmitted message are received by the user only if the identifier and the cycle data of the message match the predeterminable values, stored in the memory of the user, for the identifier and the cycle data.

However, Stoneking et al. discloses that each message includes a message ID; In order to determine whether to process a received message, each node examines the message ID from the message; each node is configured to process messages whose message IDs meet predetermined criteria; these criteria may be, for example, that the message ID is one in a defined set, is within a certain numeric range or outside of a certain numeric range; If the extracted message ID meets the predetermined criteria, then the receiving node processes the message (Stoneking et al. column 4, lines 50-58); if a particular node receives a message with a message ID that it is not configured to process, it will not process the message. If, however, a node receives a message with a message ID that it is configured to process, the node will process the message (Stoneking et al. column 7, lines 28-38); the device 400 (Stoneking et al.; Fig 5.) may include receive buffers, at least one acceptance mask and at least one filter; the mask defines a bit pattern associated with a message ID that either should be

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accepted or rejected; the mask bits are applied to filters which then perform the function of accepting or rejecting an incoming message-based on whether the message ID of the message meets a predetermined criteria defined by the mask (Stoneking et al.; column 10, lines 54-62); in a message-based network, messages are transmitted to all nodes in the network; each node must then determine whether to accept and process a message or ignore the message (Stoneking et al. column 1, lines 24-27) for the purpose of allowing coordinated control of many control nodes within the system (Stoneking et al. column 1, lines 29-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to update method of exchange of data described by Weidl et al. such that to update nodes to process only those messages which are configured to process (meet predetermined criteria) and include an acceptance mask to the nodes described by Stoneking et al. in order to allow coordinated control of many control nodes within the system (Stoneking et al. column 1, lines 29-31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Skripnikov whose telephone number is 571-270-1958. The examiner can normally be reached on Monday - Friday 9:00 AM to 5 PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 28, 2008

/Alex Skripnikov/
Examiner, Art Unit 2616

/Huy D. Vu/
Supervisory Patent Examiner, Art Unit 2616